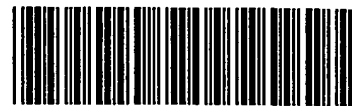


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10|572,740
Source: IFWP
Date Processed by STIC: 3-31-06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 03/31/2006

PATENT APPLICATION: US/10/572,740

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

```

5 <110> APPLICANT: Micromet AG
9 <120> TITLE OF INVENTION: Multispecific deimmunized CD3 binders
13 <130> FILE REFERENCE: G 2728 PCT
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/572,740
C--> 17 <141> CURRENT FILING DATE: 2006-03-21
17 <160> NUMBER OF SEQ ID NOS: 409
21 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
27 <211> LENGTH: 729
29 <212> TYPE: DNA
31 <213> ORGANISM: artificial sequence
35 <220> FEATURE:
37 <223> OTHER INFORMATION: wt Anti-CD3 cassette
39 <400> SEQUENCE: 1
40 gatatcaaac tgcagcagtc aggggctgaa ctggcaagac ctggggcctc agtgaagatg      60
42 tcctgcaaga cttctggcta cacccttact aggtacacga tgcactgggt aaaacagagg      120
44 cctggacagg gtctggaatg gattggatac attaatccta gccgtgggta tactaattac      180
46 aatcagaagt tcaaggacaa ggccacattg actacagaca aatcctccag cacagcctac      240
48 atgcaactga gcagcctgac atctgaggac tctgcagtct attactgtgc aagatattat      300
50 gatgatcatt actgccttga ctactggggc caaggcacca ctctcacagt ctcctcagtc      360
52 gaaggtggaa gtggagggtc tgggtggaagt ggagggttcag gtggagtcga cgacattcag      420
54 ctgaccagct ctccagcaat catgtctgca tctccagggg agaaggtcac catgacctgc      480
56 agagccagtt caagtgtgaa ttacatgaac tgggtaccagc agaagtcagg cacctcccc      540
58 aaaagatgga tttatgacac atccaaagtg gcttctggag tcccttatcg cttcagtggc      600
60 agtgggtctg ggacctcata ctctctcaca atcagcagca tggaggctga agatgctgcc      660
62 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtgctgg gaccaagctg      720
64 gagctgaaa                                     729
67 <210> SEQ ID NO: 2
69 <211> LENGTH: 243
71 <212> TYPE: PRT
73 <213> ORGANISM: artificial sequence
77 <220> FEATURE:
79 <223> OTHER INFORMATION: wt Anti-CD3 cassette
81 <400> SEQUENCE: 2
83 Asp Ile Lys Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg Pro Gly Ala
84 1          5          10          15
87 Ser Val Lys Met Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Arg Tyr
88          20          25          30
91 Thr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
92          35          40          45
95 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Asn Gln Lys Phe
96          50          55          60
99 Lys Asp Lys Ala Thr Leu Thr Thr Asp Lys Ser Ser Ser Thr Ala Tyr

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

```

100 65              70              75              80
103 Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
104              85              90              95
107 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
108              100              105              110
111 Thr Thr Leu Thr Val Ser Ser Val Glu Gly Gly Ser Gly Gly Ser Gly
112              115              120              125
115 Gly Ser Gly Gly Ser Gly Gly Val Asp Asp Ile Gln Leu Thr Gln Ser
116              130              135              140
119 Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys
120 145              150              155              160
123 Arg Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Ser
124              165              170              175
127 Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
128              180              185              190
131 Gly Val Pro Tyr Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser
132              195              200              205
135 Leu Thr Ile Ser Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
136              210              215              220
139 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu
140 225              230              235              240
143 Glu Leu Lys
147 <210> SEQ ID NO: 3
149 <211> LENGTH: 18
151 <212> TYPE: PRT
153 <213> ORGANISM: artificial sequence
157 <220> FEATURE:
159 <223> OTHER INFORMATION: deimmunized linker
161 <400> SEQUENCE: 3
163 Gly Glu Gly Thr Ser Thr Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly
164 1              5              10              15
167 Ala Asp
171 <210> SEQ ID NO: 4
173 <211> LENGTH: 729
175 <212> TYPE: DNA
177 <213> ORGANISM: artificial sequence
181 <220> FEATURE:
183 <223> OTHER INFORMATION: VH2/VL1
185 <400> SEQUENCE: 4
186 gacgtccaac tgggtgcagtc aggggctgaa gtgaaaaaac ctggggcctc agtgaaggtg      60
188 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca      120
190 cctggacagg gtctggaatg gattggatac attaatccta gccgtggtta tactaattac      180
192 gcacagaagt tgcagggccg cgtcacaatg actacagaca cttccaccag cacagcctac      240
194 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat      300
196 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctcaggc      360
198 gaaggtacta gtactggttc tggtggaagt ggaggttcag gtggagcaga cgacattcag      420
200 atgaccagtc ctccatctag cctgtctgca tctgtcgggg accgtgtcac catcacctgc      480
202 agagccagtc aaagtgtaa ttacatgaac tgggtaccagc agaagccggg caaggcaccc      540
204 aaaagatgga tttatgacac atccaaagtg gcttctggag tccctgctcg cttcagtggc      600

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

```

206 agtggggtctg ggaccgacta ctctctcaca atcaacagct tggagggtga agatgctgcc      660
208 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaagggtg      720
210 gagatcaaa                                         729
213 <210> SEQ ID NO: 5
215 <211> LENGTH: 243
217 <212> TYPE: PRT
219 <213> ORGANISM: artificial sequence
223 <220> FEATURE:
225 <223> OTHER INFORMATION: VH2/VL1
227 <400> SEQUENCE: 5
229 Asp Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
230 1          5          10          15
233 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
234          20          25          30
237 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
238          35          40          45
241 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
242          50          55          60
245 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
246 65          70          75          80
249 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
250          85          90          95
253 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
254          100         105         110
257 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
258          115         120         125
261 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Gln Met Thr Gln Ser
262          130         135         140
265 Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
266 145         150         155         160
269 Arg Ala Ser Gln Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro
270          165         170         175
273 Gly Lys Ala Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
274          180         185         190
277 Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser
278          195         200         205
281 Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
282          210         215         220
285 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Gly Gly Thr Lys Val
286 225          230          235         240
289 Glu Ile Lys
293 <210> SEQ ID NO: 6
295 <211> LENGTH: 729
297 <212> TYPE: DNA
299 <213> ORGANISM: artificial sequence
303 <220> FEATURE:
305 <223> OTHER INFORMATION: VH2/VL2
307 <400> SEQUENCE: 6
308 gacgtccaac tgggtgcagtc aggggctgaa gtgaaaaaac ctggggcctc agtgaagggtg      60

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

```

310 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca      120
312 cctggacagg gtctggaatg gattggatac attaatccta gccgtgggta tactaattac      180
314 gcacagaagt tgcagggccg cgtcacaatg actacagaca cttccaccag cacagcctac      240
316 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat      300
318 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctctcaggc      360
320 gaagggtacta gtactgggtc tgggtggaagt ggaggttcag gtggagcaga cgacattgta      420
322 ctgacccagt ctccagcaac tctgtctctg tctccagggg agcgtgccac cctgagctgc      480
324 agagccagtc aaagtgtgaa ttacatgaac tggtagcagc agaagccggg caaggcacc      540
326 aaaagatgga tttatgacac atccaaagtg gcttctggag tccctgctcg cttcagtggc      600
328 agtgggtctg ggaccgacta ctctctcaca atcaacagct tggaggctga agatgctgcc      660
330 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaaggtg      720
332 gagatcaaa                                     729
335 <210> SEQ ID NO: 7
337 <211> LENGTH: 243
339 <212> TYPE: PRT
341 <213> ORGANISM: artificial sequence
345 <220> FEATURE:
347 <223> OTHER INFORMATION: VH2/VL2
349 <400> SEQUENCE: 7
351 Asp Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
352 1 5 10 15
355 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
356 20 25 30
359 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
360 35 40 45
363 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
364 50 55 60
367 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
368 65 70 75 80
371 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
372 85 90 95
375 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
376 100 105 110
379 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
380 115 120 125
383 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Val Leu Thr Gln Ser
384 130 135 140
387 Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
388 145 150 155 160
391 Arg Ala Ser Gln Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro
392 165 170 175
395 Gly Lys Ala Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Val Ala Ser
396 180 185 190
399 Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser
400 195 200 205
403 Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys
404 210 215 220
407 Gln Gln Trp Ser Ser Asn Pro Leu Thr Phe Gly Gly Gly Thr Lys Val
408 225 230 235 240

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:54

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

```

411 Glu Ile Lys
415 <210> SEQ ID NO: 8
417 <211> LENGTH: 729
419 <212> TYPE: DNA
421 <213> ORGANISM: artificial sequence
425 <220> FEATURE:
427 <223> OTHER INFORMATION: VH2/VL3
429 <400> SEQUENCE: 8
430 gacgtccaac tgggtgcagtc aggggctgaa gtgaaaaaac ctggggcctc agtgaagggtg      60
432 tcctgcaagg cttctggcta caccgctact aggtacacga tgcactgggt aaggcaggca      120
434 cctggacagg gtctggaatg gattggatac attaatccta gccgtgggta tactaattac      180
436 gcacagaagt tgcagggccg cgtcacatg actacagaca cttccaccag cacagcctac      240
438 atggaactga gcagcctgcg ttctgaggac actgcaacct attactgtgc aagatattat      300
440 gatgatcatt actgccttga ctactggggc caaggcacca cggtcaccgt ctctcaggc      360
442 gaaggtacta gtactggttc tggtggaagt ggaggttcag gtggagcaga cgacattgta      420
444 ctgaccagtc ctccagcaac tctgtctctg tctccagggg agcgtgccac cctgacctgc      480
446 agagccagtt caagtgtaag ttacatgaac tggtagcagc agaagccggg caaggcacc      540
448 aaaagatgga tttatgacac atccaaagtg gcttctggag tccctgctcg cttcagtggc      600
450 agtgggtctg ggaccgacta ctctctcaca atcaacagct tggaggctga agatgctgcc      660
452 acttattact gccaacagtg gagtagtaac ccgctcacgt tcggtggcgg gaccaagggtg      720
454 gagatcaaa                                     729
457 <210> SEQ ID NO: 9
459 <211> LENGTH: 243
461 <212> TYPE: PRT
463 <213> ORGANISM: artificial sequence
467 <220> FEATURE:
469 <223> OTHER INFORMATION: VH2VL3
471 <400> SEQUENCE: 9
473 Asp Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
474 1                                     5                                     10                                     15
477 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Ala Thr Arg Tyr
478                                     20                                     25                                     30
481 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
482                                     35                                     40                                     45
485 Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Gln Lys Leu
486                                     50                                     55                                     60
489 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
490 65                                     70                                     75                                     80
493 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
494                                     85                                     90                                     95
497 Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
498                                     100                                    105                                    110
501 Thr Thr Val Thr Val Ser Ser Gly Glu Gly Thr Ser Thr Gly Ser Gly
502                                     115                                    120                                    125
505 Gly Ser Gly Gly Ser Gly Gly Ala Asp Asp Ile Val Leu Thr Gln Ser
506                                     130                                    135                                    140
509 Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Thr Cys
510 145                                    150                                    155                                    160
513 Arg Ala Ser Ser Ser Val Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:55

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application No

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date

STATISTICS SUMMARY

PATENT APPLICATION: US/10/572,740

DATE: 03/31/2006

TIME: 12:14:55

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\03292006\J572740.raw

Application Serial Number: US/10/572,740

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 03-21-2006

Art Unit: IFWP

Software Application: PatentIN3.1

Total Number of Sequences: 409

Total Nucleotides: 205538

Total Amino Acids: 68665

Number of Errors: 0

Number of Warnings: 0

Number of Corrections: 2

MESSAGE SUMMARY

270 C: 1 (Current Application Number differs)

271 C: 1 (Current Filing Date differs)